GOLDRING
Lenco

INSTRUCTION MANUAL

"GL 68"

TRANSCRIPTION UNIT

GOLDRING MANUFACTURING CO. (G.B.) LTD.

INSTRUCTION MANUAL FOR GOLDRING-LENCO "GL.68" TRANSCRIPTION UNIT

It is recommended that these instructions be carefully read before unpacking the Unit.

DESCRIPTION

The GL 68 transcription unit, with integrally mounted pick-up arm, incorporates the special features that have kept Goldring-Lenco units in popular demand for many years. One of the most important features is the complete versatility of the speed adjustment provisions, resulting in continuously variable speed control from below 30 r.p.m. to above 80 r.p.m., and considerable latitude below and above 16 r.p.m.—with positive click-in positions (all separately adjustable) for the usual four nominal playing speeds.

The pick-up arm, newly introduced on this unit, is the Goldring G65, of low mass tubular construction, with sliding counterweight for stylus pressure adjustment. The height of the arm is variable to suit the cartridge used. Any cartridge of standard fixing dimensions can be accommodated on the interchangeable head-slide, which is of a new type making use of self-cleaning wiper contacts. Miniature precision ball races are employed in the arm to maintain a high stability/free movement ratio.

The large diameter steel turntable is driven, through the unique Lenco system, by a 4-pole heavy duty constant velocity motor, with flutter, rumble and hum at a negligible minimum. The "idler" is automatically disengaged from both turntable and drive by the on/off switch, which is also coupled to a positive but gentle pick-up lowering/raising device.

SPECIFICATION

A.C. mains, 200/250 v., 50 c.p.s.
4-pole constant velocity motor 15 watts.
Continuously variable speed adjustment.
Positive click-in positions (adjustable) for 16, 33⅓, 45 and 78 r.p.m.
3¾ lb. steel turntable.
Centre spindle of ground lapped steel.

Wow and flutter less than 0.2%.
Rumble and hum negligible.
Less than 1% speed change for 13% mains/voltage change.
Pick-up arm G.65.
Built-in pick-up lowering device.
Automatic disengagement of idler wheel.

DIMENSIONS

Minimum cabinet dimensions 15" x 13".
Clearance above motor plate 3".
Below motor plate 2⅜".

WARNING. The motor is held in position by two transit screws "B" for safety in transit. Before the unit can be played these must be removed.

1. UNPACKING. This unit was carefully checked before leaving the factory. Observe the condition of the packing carton for signs of improper handling in transit. If damage is apparent, make an immediate claim to the dealer from whom you made the purchase. Check that all items shown in paragraph 4 are complete.

2. BASEBOARD. The unit should be mounted on a wooden baseboard about $\frac{1}{2}$"–$\frac{3}{4}$" thick and of somewhat the same size as outlined on the enclosed template sheet.

The baseboard should be cut so as to provide one large cut-out, and drilled for four holes of 1" diameter.

The position of the cut-out and the holes may be obtained by either of these two methods:—

(a) Cover the baseboard with carbon paper laid face downwards and fix the template in the desired position with drawing pins at the given hole centres; then scribe on the heavy outline of the cut-out, so that the line is reproduced on the baseboard by the carbon paper.

(b) Attach template to the baseboard with self-adhesive tape or with pins, and prick through the template with a sharp pointed instrument such as a scriber or bradawl.

3. CABINET CLEARANCES. Top clearance: 3" above top surface of wooden baseboard. Bottom clearance: $2\frac{3}{8}$" below top surface of wooden baseboard.

4. CONTENTS OF CARTON. The following items are contained in the carton:—

(a) Turntable.
(b) Rubber mat.
(c) Motor unit complete with mounting plate.
(d) Headslide "N" for pick-up arm.
(e) Circular plastic mounding 1½" diameter. This is for use with those 45 r.p.m. records with 1½" centre holes. Place the moulding over the centre spindle "A" and the 45 r.p.m. record will then fit.
(f) An envelope containing components for mounting the unit.
(g) A spring clip. This fits over the centre spindle and keeps the turntable secure.
(h) Pick-up lowering arm "G".
(i) Stroboscope.

5. MOUNTING MOTOR UNIT TO BASE-BOARD. An exploded view of the mounting is shown on the template.

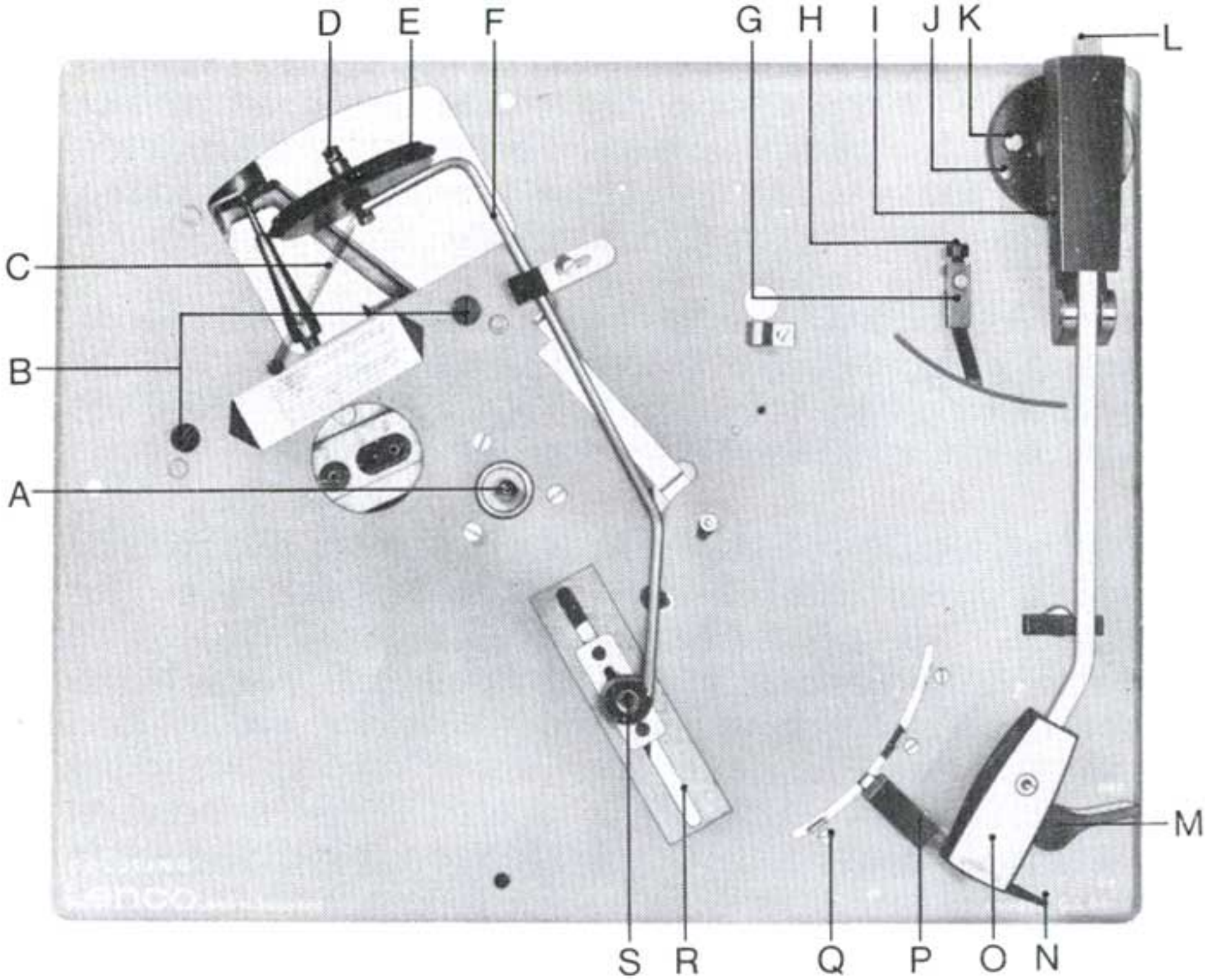
6. MOUNTING PROCEDURE. Screw the threaded spindle into the tapped boss "Y" underneath the base plate **having first removed from these bosses the grub screws.** Run the nylon nut up the spindle until it is tight against the boss. Screw the mounting plates on to the baseboard as shown on template. Push rubber bush over the threaded spindle and lower unit on to motor mounting board so that the threaded spindles protrude through the mounting plates. Offer the springs to the mounting plate and secure with locknut. Levelling of unit is achieved by tightening or loosening this locknut.

7. TURNTABLE. Place the turntable on the centre spindle "A" and ensure that it is firmly seated. Secure with the spring clip. Place the loose rubber mat over the centre spindle. To remove the turntable apply a sharp tap to the centre spindle with a wooden block while lifting up the turntable.

8. MAINS SUPPLY. The unit is normally supplied for 200/250 volts 50 cycles A.C. mains. Connect the mains lead "V" to your supply, ensuring that before this is done the unit is in the OFF position.

9. PICK-UP ARM. The headslide "N" of the G.65 transcription arm fitted to this unit is wired for stereo. The connections are shown in Fig. 3. To remove the headslide grip the headshell "O" with the left hand and with the right hand grip the protrusions on the front. Pull gently forward. When replacing the headslide ensure that it is located in the slideways.
Height Adjustment. The optimum playing position for the pick-up arm is when it is parallel to the record when the stylus is on the record. To adjust the height undo the clamping screw "I" in the pedestal base and move the arm up or down until it is parallel to the record, then tighten the screw.
Levelling. Ensure that the base plate is level by means of a spirit level. Should the arm show a tendency to swing of its own accord to one side or the other, this can be rectified by means of the levelling screws "J" in the pedestal base. Loosen the two fixing screws "K" in the pedestal base and adjust the three levelling screws until the arm remains stationary. Tighten the fixing screws.
Stylus pressure Adjustment. Set the stylus pressure to the recommended value for the cartridge.

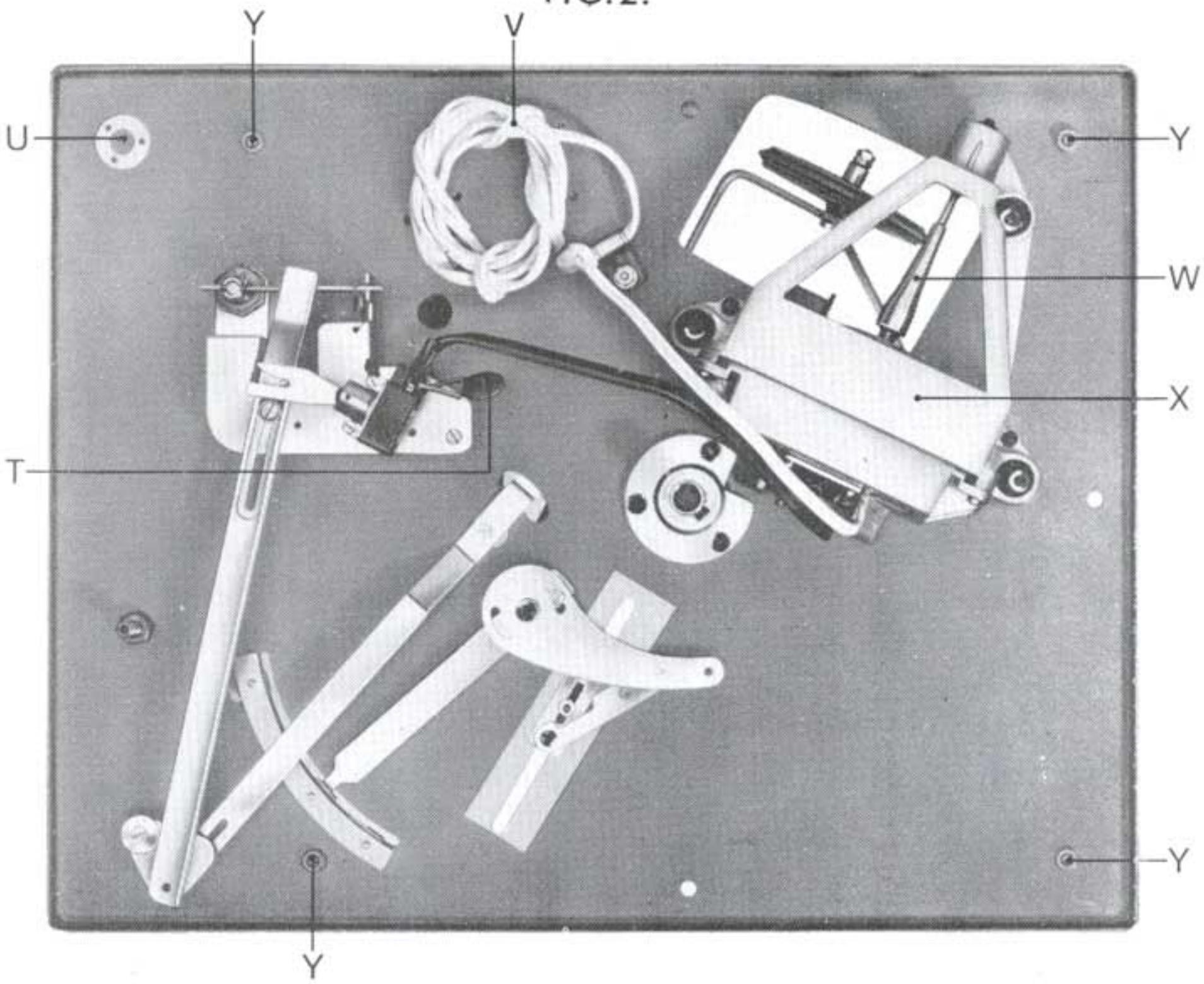
FIG.1.



TRUE PLAN

TURNTABLE SPINDLE	A
TRANSIT SCREWS	B
IDLER WHEEL SPRING	C
IDLER WHEEL LOCKNUTS	D
IDLER WHEEL	E
IDLER WHEEL ARM	F
LOWERING ARM	G
LOWERING ARM HEIGHT ADJUSTING SCREW	H
ARM HEIGHT ADJUSTING SCREW	I
LEVELLING SCREWS	J
ARM FIXING SCREWS	K
STYLUS PRESSURE ADJUSTING SCREW	L
ON-OFF SWITCH LEVER	M
HEADSLIDE	N
HEAD SHELL	O
SPEED REGULATOR	P
SPEED ADJUSTING SCREW	Q
SLIDEWAY	R
IDLER WHEEL CIRCLIP	S

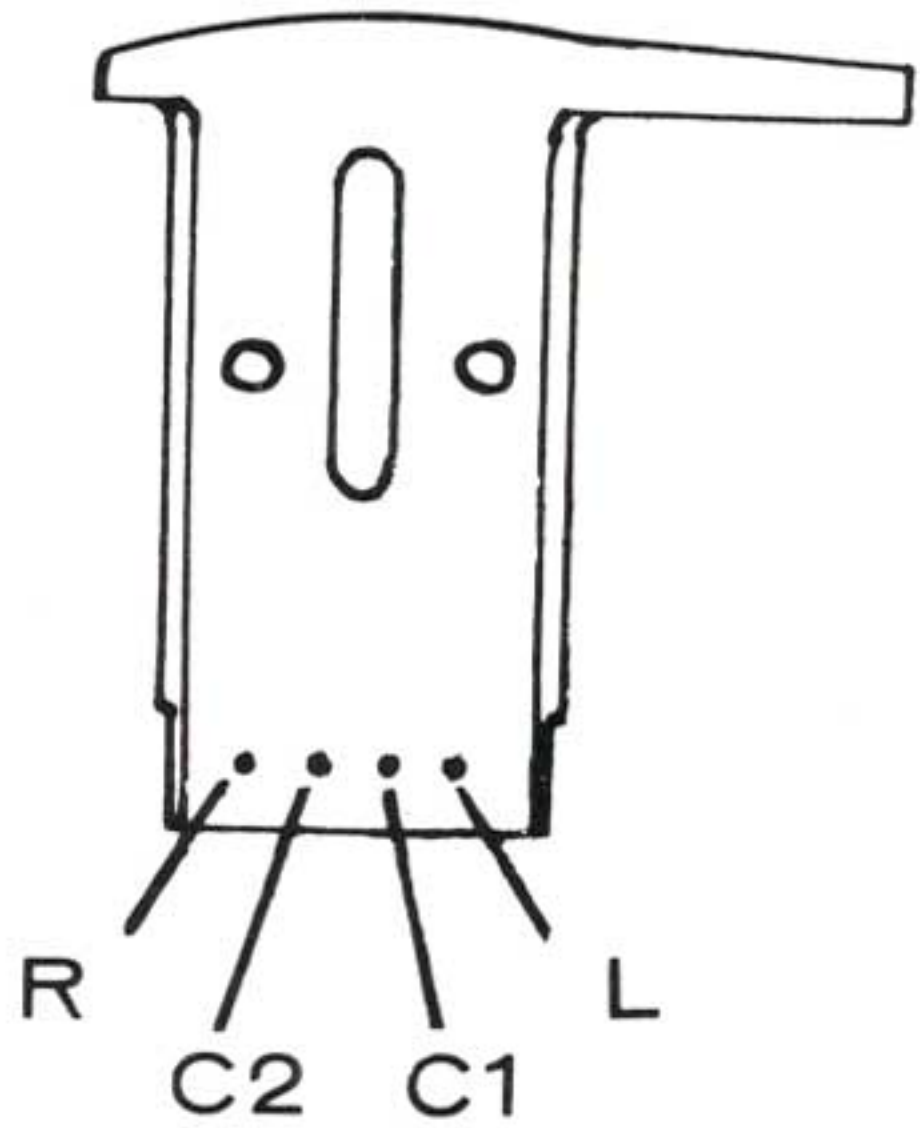
FIG. 2.



UNDERSIDE PLAN

SWITCH CLICK SUPPRESSOR	T
3-PIN SOCKET IN BASE OF ARM	U
MAINS LEAD	V
MOTOR CONE	W
MOTOR	X
SPRING-MOUNTING BOSSES	Y

FIG.3.



VIEW FROM UNDERSIDE
OF HEAD SLIDE.

A stylus pressure balance should be used for this purpose. To increase stylus pressure the knurled screw "L" on the rear part of the arm should be turned anti-clockwise, and to reduce it should be turned clockwise.

10. LOWERING ARM "G". This should be fitted to the spigot as shown in the illustration. Place a record on the turntable and the pick-up on the record. Turn the On/Off switch "M" to the play position and adjust the height of the locating arm until there is $\frac{1}{16}$" clearance between it and the pick-up arm. Tighten the screw "H" on the lowering arm and turn switch to the OFF position. The pick-up should now be automatically lifted off the record.

11. CONNECTIONS TO AMPLIFIER. Connect the pick-up cable to the socket "U" in the pedestal of the arm. The leads are terminated in Phono plugs which are standard and should fit most amplifiers.

The one colour coded red is the right-hand channel and should be plugged into the right-hand channel input of the amplifier. The one colour coded white is the left-hand channel and should be plugged into the left-hand channel of the amplifier.

The unit is now ready for playing.

12. TO PLAY. Check that the mains are correctly connected and switched on. Check that the amplifier connections are made and the amplifier is switched on. Check that the speed regulator "P" is set to the correct speed for the record and that the correct stylus has been selected. Place the record on the turntable, position the pick-up on the lowering arm above the desired passage of the record. Turn the On/Off switch "M" slowly in a clockwise direction and the motor will start. Continue turning slowly and the pick-up arm will automatically be lowered gently on to the record. At the end of the record or at the end of any passage you may choose, turn the switch anti-clockwise and the pick-up will be lifted off the record and the motor switched off.

13. SPEED ADJUSTMENT. Although every care has been taken to ensure that the speed locations are pre-set accurately, it is possible that due to transit or in mounting these have become slightly altered. Check each speed with the stroboscope which is supplied with the unit and should adjustment be necessary this can be done by adjusting the set-screw "Q" at the side of each speed catch and moving the speed change lever until the lines for the required speed on the stroboscope appear to remain station-ary. The set screw should then be tightened. Repeat this test at each speed.

N.B. That side of the stroboscope marked 50~ should be used in the United Kingdom. The stroboscope should be illuminated from an ordinary electric lamp operating on the appropriate A.C. mains supply whilst checking speeds. If this is not done the lines will not appear to remain stationary at any time.

14. IMPORTANT. Always switch off the motor before switching off at the mains.

15. MAINTENANCE AND SERVICE. The motor bearings and turntable spindle bearings are self-lubricating and no further lubrication should be necessary. Should the slideway "R" of the speed change mechanism run dry, then a small amount of vaseline should be applied. Care must always be taken that the underside of the turntable and the idler wheel be kept clean and free from grease.

IF the turntable does not rotate but the motor is going, then the idler wheel spring "C" needs replacing.

IF the motor does not operate when the unit is switched on, check that the mains are connected correctly. Should the motor still not operate, then a fault has developed and the motor should be repaired.

IF the motor continues to operate when the unit is switched off, then the switch click suppressing condenser "T" is faulty and should be replaced.

IF the speed is erratic or a rumble develops, then the idler wheel "E" should be cleaned with carbon tetrachloride as should be the underside of the turntable and the motor cone "W".

IF a flat has developed on the idler wheel, this should be replaced. To replace idler wheel remove the circlip "S" and unhook the spring "C". Lift out the idler wheel arm "F". The idler wheel is secured by two locknuts "D". Undo these and slide the idler wheel off the spindle. Fit the new idler wheel, taking care not to touch the rubber ring. Do not over-tighten the locknuts. Replace assembly and refit spring and circlip.

Recommended cartridges for this Unit are:—

PICKERING V.15.AM1	Micro-magnetic stereo cartridge.
PICKERING V.15.AME1	Micro-Magnetic stereo cartridge fitted with elliptical diamond stylus.
PICKERING 380A	Moving magnet stereo cartridge.
GOLDRING CS.90	Ceramic Stereo cartridge.
GOLDRING CS.91/E	Ceramic stereo cartridge fitted with elliptical diamond stylus.
GOLDRING 580	Variable reluctance mono cartridge.
GOLDRING 600	Variable reluctance mono cartridge fitted with diamond stylus.

A Cabinet, Model C.68 already cut out to accommodate this Unit is available. Of elegant design and finished in sapele mahogany, it comes complete with a clear perspex dust cover.